CONTENTS

Vol. 121, No. 1, January, 1977

Histochemical quantification of glucose-6-phosphate dehydrogenase activity in human hair follicles. *Y. Sasai, S. Nakano and K. Ando* 1

Morphological and electrophysiological changes in cultured spinal ganglion cells during development. *Y. Handa* 13

Insulin response to glucose or glucagon in subclinical diabetes previously injected with tolbutamide. *A. Ohneda, K. Watanabe, Y. Maruhama, H. Itabashi, K. Horigome, M. Chiba, Y. Kai, T. Sakai and F. Okuguchi* 27

Studies on the properties of the immunologically effective anti-tumor substance from spleen cells of tumor-resistant rats. *Y. Ishikawa, A. Hokama, M. Fukushima, T. Nishikawa and M. Kojika* 33

Effects of vitamin E on the platelet aggregation induced by combined adenosine diphosphate and hydrogen peroxide. *O. Higashi and W. Ishigaki* 41

Effects of eye movements upon excitability of cat superior colliculus as tested by electrical stimulation of the cortico-collicular pathway. *T. Nagata and Y. Hayashi* 47

Thin layer chromatography and fluorescent scanning analysis of porphyrins. *T. Miura and W. Torinuki* 57

Some properties of rabbit anti-human thymus serum. *T. Nishihira, T. Kunori, M. Tan, E. Tsutsumi and M. Kasai* 63

Quantitative studies of the activities of anti-human tonsil sera and anti-human spleen sera against B lymphocyte. *T. Nishihira, T. Kunori, M. Tan, E. Tsutsumi and M. Kasai* 69

Isolation of drug-resistant bacteria from newborn infants. *N. Mitsuhashi and M. Kaneko* 77

A comparative study of the effect of vitamin E-nicotinate and the combination of vitamin E and nicotinic acid on the hydrogen peroxide-induced platelet aggregation. *O. Higashi and Y. Kikuchi* 81

Immunohistochemical demonstration of somatostatin-positive cells in the canine gut. *S. Ito, Y. Yamada and S. Kobayashi* 85

Response of lower esophageal sphincter pressure to beef soup or AOC-tetrapeptide stimulation in esophagitis. *A. Nagasaki, A. Ishimori, O. Masamune and Su. Yamagata* 91

Vol. 121, No. 2, February, 1977

Plasma C-peptide response to oral glucose in low insulin responders, subdiabetic, and diabetic subjects. *T. Toyota, M. Kudo, K. Abe and Y. Goto* 99

Influence of salivary glands extirpation on procreation in rats. *R.M. Arcieri and C. Martinelli* 105

Effect of spironolactone on urinary kallikrein excretion in patients with essential hypertension and in primary aldosteronism. *M. Seino, K. Abe, Y. Sakurai, N. Irokawa, M. Yasujima, S. Chiba, Y. Otsuka and K. Yoshinaga* 111

Further evidence for the involvement of base and base sequence in the antigenic determination of thermally denatured DNA. *A. Wakizaka and E. Okuhara* 121

Stomach cancer of a 14-year-old boy with ataxia-telangiectasia. *A. Watanabe, H. Hanazono, H. Sogawa and H. Takaya* 127

A constant electrical activity of the renal pelvis correlated to ureteral peristalsis. *S. Tsuchida and O. Yamaguchi* 133

Altered growth behavior and phenotypic expression of cells of mouse and hamster cell lines after treatment with polyanions. *M. Goto, T. Kimura, H. Sato, S. Suzuki and M. Suzuki* 143

Effects of pacing location on coronary circulation in dogs. *K. Miyazawa, K. Shirato, T. Haneda, T. Honna, T. Arai and T. Nakajima* 149

Cell cycles in two cell lines of human bladder carcinoma. *T. Kato, R.J. Irwin, Jr. and G.R. Prout, Jr.* 157

Autoregulation of renal blood flow during ether, halothane and methoxyflurane anesthesia in dogs. *H. Sasaki, Y. Hashimoto and K. Iwatsuki* 165

Determination of hydroxylysine in urine. *T. Sato, T. Saito, M. Kokubun, M. Ito and K. Yoshinaga* 173

Inherited chromosomal translocation in two families (t(4q−; 13q+) and t(5q−; 13q+)). *G. Watanabe, Y. Kiyoi, I. Takeyama, S. Kawana and M. Yamamoto* 179

Infantile type of homocystinuria with $N^{5,10}$-methylenetetrahydrofolate reductase defect. *K. Narisawa, Y. Wada, T. Saito, H. Suzuki, M. Kudo, Ts. Arakawa, N. Katsushima and R. Tsuboi* 185

Short Report

Serum angiotensin converting enzyme actitity in human bronchial asthma. *M. Takahashi, S. Mue, T. Ohmi, S. Shibahara, K. Yamauchi, S. Fujimoto and T. Takishima* 195

Vol. 121, No. 3, March, 1977

Abnormal growth hormone responses to L-dopa and thyrotropin-releasing hormone in patients with acromegaly. *K. Hanew, M. Aida, T. Tano and K. Yoshinaga* 197

Responses of crayfish muscle preparations to nerve stimulation with various patterns of impulse sequence. Effects of intermittent, intercalated and adaptational types of impulse sequence. *T. Wakabayashi and T. Kuroda* 207

Effect of stimulation with impulse trains of various patterns, including adaptational type, on frog's nerve-muscle and spinal reflex preparations. *T. Wakabayashi and T. Kuroda* 219

Changes of hypophysio-ovarian endocrinological function by aging in women. *N. Furuhashi, M. Suzuki, T. Abe, Y. Yamaya and K. Takahashi* 231

Detection of A, B and H(O) antigens in normal and neoplastic epithelium of the urinary bladder by the specific red cell adherence test (SRCA). *T. Kato* 239

Parotid saliva tests in patients with pancreatic diseases before and after surgery. *G. Kakizaki, T. Saito, T. Soeno, M. Sasahara, Y. Fujiwara, Y. Saito and N. Noto* 247

Feto-maternal amino acid patterns and cyclic AMP in the human placenta with abnormal pregnancies, particularly with SFD. *T. Matsuda, Y. Nakano, Y. Nishikawa and R. Yamaguchi* 253

Triglyceride metabolism in the lung. *S. Yasuoka, T. Sakamoto, M. Takata, I. Ohori and E. Tsubura* 263

Biochemical differences between human malignant and benign insulinoma tissues. *I. Nakazawa, A. Ohneda and K. Miura* 275

Clinical and edidemiological studies on hepatitis B in children. *T. Fujiwara, S. Chiba, T. Nakao and H. Ito* 281

Effects of halothane on coronary and systemic circulations, myocardial metabolism and blood flow distribution within the canine heart. *T. Saito, K. Okazaki, S. Sakata, R. Tonogai, Y. Tanaka, K. Takata, M. Asai, F. Matsuda, Y. Yamada, T. Tomino and Y. Tomino* 289

Vol. 121, No. 4, April, 1977

The occurrence of electron dense intercellular materials and gap junctions in the human intestinal epithelium. *H. Suzuki, T. Konno, Y. Igarashi and T.Y. Yamamoto* 301

Acute effects of intravenous infusion of conjugated estrogen on serum levels of LH and FSH in post-menopausal and castrated women. *N. Furuhashi, T. Abe, M. Suzuki, Y. Yamaya, K. Takahashi, H. Hoshiai and Y. Wada* 315

Neuronal activity in cortical efferent zones projecting to wrist extensors during voluntary wrist extension in the monkey. *H. Yumiya* 321

The effect of atropine on ventriculoatrial conduction during ventricular pacing in patients with and without Wolff-Parkinson-White syndrome. *M. Ito, S. Shinoda, M. Nagashima, T. Furuta, T. Tokudome, M. Otaki and H. Suzuki* 327

Intra-His bundle block following ligation of anterior septal artery in dog. *K. Murata, T. Tajima, Y. Hojyo, S. Takase and K. Ito* 337

Low renin hypertension — is it a stage of essential hypertension? *K. Abe, N. Irokawa, H. Aoyagi, M. Seino, M. Yasujima, K. Ritz, T. Ito, S. Chiba, Y. Sakurai, K. Saito, T. Kusaka, Y. Otsuka, S. Miyazaki and K. Yoshinaga* 347

Statistical study on malignant melanoma in Japan (1970-1976). *T. Ohsumi and M. Seiji* 355

Estimation of the distribution of ellipsoids with random test lines. *N. Suwa* 365

A trial of quantitative classification of surgical stress. *T. Funyu, S. Kudoh, H. Hitomi, S. Sugawara, T. Suzuki, K. Nigawara, K. Nakano and Y. Terayama* 371

Chronotropic effects of coronary vasodilators as assessed in the isolated, blood-perfused sino-atrial node preparation of the dog. *H. Ono, N. Himori and N. Taira* 383

Cidal and subcidal effect of triethylene thiophosphoramide on cell kinetics of human bladder carcinoma cells in vitro. *T. Kato and R.J. Irwin, Jr.* 391

Short Reports

Behavior of hemopoietic stem cells (CFU-S) of mice acutely poisoned with carbon tetrachloride (CCl_4). *K. Yoshida, A. Yamaguchi, M. Fukuda and A. Shibata* 401

Estimation of cell damage in monolayer culture using ^{14}C-leucine incorporation. *T. Kato, K. Ishikawa and R. Nemoto* 403

AUTHOR INDEX

Abe, Kanji 99
Abe, Keishi 111, 347
Abe, Tetsuro 231, 315
Aida, Mitsuyasu 197
Ando, Kenji 1
Aoyyagi, Haruki 347
Arai, Toru 149
Arakawa, Tsuneo 185
Arcieri, Rubens Moreira 105
Asai, Mikio 289

Chiba, Masamichi 27
Chiba, Satoru 111, 347
Chiba, Shunzo 281

Fujimoto, Satoru 195
Fujiwara, Tateki 281
Fujiwara, Yoshiyuki 247
Fukuda, Mitsuyuki 401
Fukushima, Matsuro 33
Funyu, Tomihisa 371
Furuhashi, Nobuaki 231, 315
Furuta, Tatsuji 327

Goto, Masayoshi 143
Goto, Yoshio 99

Hanazono, Hisaaki 127
Handa, Yasunobu 13
Haneda, Takashi 149
Hanew, Kunihiko 197
Hashimoto, Yasuhiko 165
Hayashi, Yasumasa 47
Higashi, Ototaka 41, 81
Himori, Norio 383
Hitomi, Hiroshi 371
Hojyo, Yoshimichi 337
Hokama, Akira 33
Honna, Takao 149
Horigome, Ken 27
Hoshiai, Hiroshi 315

Igarashi, Yutaka 301
Irokawa, Nobuo 111, 347
Irwin, Robert J., Jr. 157, 391
Ishigaki, Wakako 41
Ishikawa, Kiyoshi 403
Ishikawa, Yoshinobu 33
Ishimori, Akira 91
Itabashi, Hiroshi 27
Ito, Hiroyoshi 281
Ito, Kimio 337
Ito, Masaaki 173
Ito, Meiichi 327
Ito, Seiki 85
Ito, Toru 347
Iwatsuki, Kenichi 165

Kai, Yukihiro 27
Kakizaki, Goro 247
Kaneko, Minoru 77
Kasai, Morio 63, 69
Kato, Tetsuro 157, 239, 391, 403
Katsushima, Noriko 185
Kawana, Seiji 179
Kikuchi, Yoko 81
Kimura, Tetsuo 143
Kiyoi, Yoko 179
Kobayashi, Shigeru 85
Kojika, Masari 33
Kokubun, Masaru 173
Konno, Tasuke 301
Kudo, Masafumi 185
Kudo, Mikihiko 99
Kudoh, Shigenobu 371
Kunori, Takao 63, 69
Kuroda, Toshiko 207, 219
Kusaka, Takashi 347

Martinelli, Celso 105
Maruhama, Yoshisuke 27
Masamune, Osamu 91
Matsuda, Fumihide 289
Matsuda, Tetsunori 253
Mitsuhashi, Naoki 77
Miura, Kiyomi 275
Miura, Takashi 57
Miyazaki, Seizi 347
Miyazawa, Kozui 149
Mue, Suetsugu 195
Murata, Kazuhiko 337

Nagasaki, Akio 91
Nagashima, Michio 327
Nagata, Tetsu 47
Nakajima, Toshiyuki 149
Nakano, Keiko 371
Nakano, Shozo 1
Nakano, Yoshikazu 253
Nakao, Tooru 281
Nakazawa, Ichiro 275
Narisawa, Kuniaki 185

Nemoto, Ryosuke 403
Nigawara, Kazuo 371
Nishihira, Tetsuro 63, 69
Nishikawa, Teiji 33
Nishikawa, Yoshio 253
Noto, Noboru 247

Ohmi, Tetsuhiro 195
Ohneda, Akira 27, 275
Ohori, Isuzu 263
Ohsumi, Takeshi 355
Okazaki, Kameyoshi 289
Okuguchi, Fuminobu 27
Okuhara, Eiji 121
Ono, Hiroshi 383
Otaki, Masamichi 327
Otsuka, Yoichi 111, 347

Prout, George R., Jr. 157

Ritz, Kancho 347

Saito, Keitaro 347
Saito, Takao 289
Saito, Takashi 185
Saito, Takayuki 247
Saito, Tsuyoshi 173
Saito, Yoichi 247
Sakai, Takeaki 27
Sakamoto, Takashi 263
Sakata, Seisaku 289
Sakurai, Yutaka 111, 347
Sasahara, Masami 247
Sasai, Yoichiro 1
Sasaki, Hisako 165
Sato, Haruo 143
Sato, Tokutaro 173
Seiji, Makoto 355
Seino, Masahide 111, 347
Shibahara, Shigeki 195
Shibata, Akira 401
Shinoda, Susumu 327
Shirato, Kunio 149
Soeno, Takehiko 247
Sogawa, Hideaki 127
Sugawara, Shigeru 371
Suwa, Norio 365
Suzuki, Hikoyuki 327
Suzuki, Hiroshi 185, 301
Suzuki, Masako 143
Suzuki, Masakuni 231, 315
Suzuki, Tadashi 371
Suzuki, Sigeo 143

Taira, Norio 383
Tajima, Tsunemi 337
Takahashi, Katsuyuki 231, 315
Takahashi, Makoto 195
Takase, Shin-ichi 337
Takata, Kazuko 289
Takata, Masaru 263
Takaya, Hikoichiro 127
Takeyama, Isao 179
Takishima, Tamotsu 195
Tan, Masaki 63, 69
Tanaka, Yukio 289
Tano, Takehiro 197
Terayama, Yuriko 371
Tokudome, Toshihiro 327
Tomino, Takehito 289
Tomino, Yasuko 289
Tonogai, Ryuichi 289
Torinuki, Wakio 57
Toyota, Takayoshi 99
Tsuboi, Reiko 185
Tsubura, Eiro 263
Tsuchida, Seigi 133
Tsutsumi, Eiaki 63, 69

Wada, Yoshiro 185
Wada, Yuichi 315
Wakabayashi, Tsutomu 207, 219
Wakizaka, Akira 121
Watanabe, Akira 127
Watanabe, Gentaro 179
Watanabe, Kiyoshi 27

Yamada, Yasuhito 289
Yamada, Yukio 85
Yamagata, Susumu 91
Yamaguchi, Akihiko 401
Yamaguchi, Osamu 133
Yamaguchi, Ryuji 253
Yamamoto, Masaharu 179
Yamamoto, Toshi Yuki 301
Yamauchi, Kohei 195
Yamaya, Yoshihiro 231, 315
Yasujima, Minoru 111, 347
Yasuoka, Susumu 263
Yoshida, Kosaku 401
Yoshinaga, Kaoru 111, 173 197, 347
Yumiya, Haruhide 321

CONTENTS

Vol. 122, No. 1, May, 1977

Effects of isometric handgrip exercise on coronary sinus blood flow in idiopathic cardiomyopathy. *K. Miyazawa, T. Haneda, K. Shirato, T. Honna and T. Takishima* 1

Catecholamine metabolism in the patients with rheumatoid arthritis. *T. Igari, M. Takeda, K. Obara and S. Ono* 9

Molecular composition of lecithins in the primary hepatoma induced by 3′-methyl-4-dimethylaminoazobenzene. *G. Okano, T. Akino and Y. Mochizuki* 21

Effect of dialysis treatment on glucose metabolism in uremic patients. *H. Kaneda and N. Mimura* 35

Determination of transcoronary circulatory transport function. *K. Tsuiki, J. Nagasawa and T. Nakamura* 43

Measurement of cardiac output by earpiece dye-dilution method with automatic calibration of dye concentration. *R. Katori, T. Hayashi, K. Kanamasa and K. Ishikawa* 51

The significance of candiduria. *T. Umenai and N. Ishida* 59

Potassium levels in the aqueous and vitreous humor after death. *S. Komura and S. Oshiro* 65

Immunological and biochemical investigations on the fluorocarbon-treated antigens obtained from placenta and from cancer tissues. *K. Oh-Uti, T. Nishikawa, M. Konn, Y. Shishido and K. Akiyama* 69

Adsorption of mercury to urinary cells or particles. *H. Satoh, S. Shishido-Kashiwazaki, T. Suzuki and N. Ishihara* 81

Immunohistochemical demonstration of somatostatin-containing cells in the human, dog and rat thyroids. *Y. Yamada, S. Ito, Y. Matsubara and S. Kobayashi* 87

Activities of catalase in leucocytes and glucose-6-phosphate dehydrogenase in erythrocytes of hypocatalasemia and acatalasemia. *M. Ogata, J. Mizugaki, K. Taketa and S. Takahara* 93

Vol. 122, No. 2, June, 1977

Dependency representing Markov properties of spike trains recorded from central single neurons. *H. Nakahama, M. Yamamoto, H. Fujii, K. Aya and Y. Tani* 99

Surgical treatment and adjuvant chemotherapy of gastric cancer on the basis of pathological findings. *K. Yoshida, H. Ikeuchi, M. Oshibe, T. Machida, H. Hoshi M. Takahashi* 113

Local injection of antitumor agents in the gastric wall for treatment of nodal metastases of gastric carcinoma. *K. Kikuchi, Y. Aneha, H. Kanno, Y. Kunii and K. Hirata* 121

Ultrastructural study of immunoblastic lymphadenopathy. *N. Matsumoto, T. Ishihara, H. Fujii, T. Shiomura, K. Yamauchi, Y. Yamashita, F. Uchino and S. Miwa* 129

Effect of starvation on excretion, distribution and metabolism of DDT in mice. *Y. Ohmiya and K. Nakai* 143

Growth behavior of ascites tumor cells in three-dimensional agar culture. *H. Sato, M. Goto and S. Hosaka* 155

Characteristic differences in inhibitory effects of oligodeoxyribonucleotides from DNA on human systemic lupus erythematodes (SLE) sera and rabbit anti-DNA sera. *A. Wakizaka and E. Okuhara* 161

Regional contraction patterns of the left ventricle during ventricular pacing. *K. Miyazawa, T. Arai, K. Shirato, T. Haneda, S. Ikeda, T. Honna, T. Nakajima and T. Miura* 167

Cell-mediated immunity to measles virus in subacute sclerosing panencephalitis. *T. Yamanaka, S. Chiba, T. Nakao, N. Okabe, N. Takahashi, S. Saito, T. Kitayama, H. Mishima, K. Konno and K. Fujiwara* 175

Effect of exercise on alimentary lipemia in healthy men. *Y. Maruhama, R. Abe, F. Okuguchi and H. Ohmori* 183

Clinical evaluation of angiotensin II antagonist in advanced hypertension. *M. Yasujima, K. Abe, N. Irokawa, K. Ritsu, M. Seino, K. Saito, Y. Sakurai, S. Chiba, T. Ito and K. Yoshinaga* 191

Vol. 122, No. 3, July, 1977

Changes in glucose tolerance and insulin response in subclinical diabetes after treatment. *A. Ohneda, K. Watanabe, Y. Maruhama, H. Itabashi, K. Horigome, M. Chiba, Y. Kai, T. Sakai and F. Okuguchi* 199

Effects of various types of vagotomy on gastrin release and gastric secretion in dogs. *T. Shiratori, T. Okabayashi, M. Nishigori, R. Sakurai and Y. Shimano* 209

β_2-Glycoprotein I in rheumatoid arthritis. *S. Kosaka* 223

The thyroid reserve in patients with breast cancer. *S. Saito, R. Abe, T. Sakurada, K. Yoshida, M. Kimura, M. Yamamoto, K. Kaise, N. Kaise and K. Yoshinaga* 229

Light and electron microscopic study of skin lesions of patients with the hand, foot and mouth disease. *A. Kimura, M. Abe and T. Nakao* 237

Histopathological studies on the prognosis of biliary atresia. *T. Chiba* 249

A simple method of cell-mediated cytotoxic assay by postlabeling of tritiated thymidine. *K. Toh and K. Kikuchi* 259

Preparation of anti-M and -N antibodies by use of dextran gel as an immuno-adsorbent. *K. Sagisaka, M. Iwasa and C. Umezu* 267

P_{AO_2}-Pa_{O_2} relationship for the entire therapeutic range of oxygen in acute respiratory failure. *K. Suwa* 275

Effects of gastrointestinal hormones on the electrical and mechanical activity of the cat stomach. *H. Ohkawa and M. Watanabe* 287

Short Reports

Antibacterial activity detected in duodenal juice. *T. Umenai, T. Sasaki and T. Konno* 299

Effect of plasma-cholinesterase preparation on the phase II block of succinylcholine chloride in man. *Y. Hashimoto, T. Shima and S. Matsukawa* 301

Vol. 122, No. 4, August, 1977

Results of surgical treatment for intrahepatic gallstones. *T. Sato, T. Matsushiro, N. Suzuki and W. Takahashi* 303

A rapid fluorometric assay of angiotensin-converting enzyme. *M. Hayakari and Y. Kondo* 313

Disinhibition of perigeniculate reticular neurons following chronic ablation of the visual cortex in rats. *I. Sumitomo, M. Sugitani and K. Iwama* 321

A new method for evaluating an increased general capillary permeability in patients. *T. Kuroyanagi and K. Kura* 331

Immunogenicity of rice dwarf virus-ribonucleic acid. *Y. Kitagawa, T. Matsumoto, E. Okuhara and E. Shikata* 337

Pregnancy-associated globulin in body fluids of pregnant women. *N. Yoshioka and K. Takahashi* 345

Subpopulations of B- and T-lymphocytes in peripheral blood of rheumatoid patients. *S. Kosaka* 349

Pathology of lupus nephritis with special reference to the immunological bases of glomerular changes. *T. Fujimoto and T. Kitamura* 355

Pulmonary arterial pressure-flow characteristics in atrial septal defect: Comparative study with ventricular septal defect and patent ductus arteriosus. *K. Miyazawa, T. Haneda, K. Shirato and K. Tsuiki* 375

Incidence of pregnancy-specific beta-1-glycoprotein in sera of malignant tumor patients. *N. Yoshioka, K. Takahashi, T. Oshima and T. Watanabe* 383

Echocardiographic features of straddling mitral valve. *Y. Yoshida, M. Fukuda, T. Sasaki, H. Hoshino and T. Sato* 387

α-L-Iduronidase activity in established lymphoblastoid cells from patients with Hurler and Scheie syndromes transformed by Epstein-Barr virus. *R. Minami, M. Suzuki, T. Kudoh, S. Sato, K. Oyanagi, T. Nakao, K. Sukegawa and T. Orii* 393

Diagnostic significance of the Sudan III staining for fecal fat. *O. Masamune, T. Takahashi, A. Nagasaki, J. Iwabuchi and M. Ishikawa* 397

Short Report

Myroridin, a new peptide antibiotic from *Myrothecium* SP. 285F. *S. Kondo* 403

AUTHOR INDEX

Abe, Keishi 191
Abe, Masanori 237
Abe, Rikiya 229
Abe, Ryuzo 183
Akino, Toyoaki 21
Akiyama, Kunio 69
Aneha, Yasumasa 121
Arai, Toru 167
Aya, Kojiro 99

Chiba, Masamichi 199
Chiba, Satoru 191
Chiba, Shunzo 175
Chiba, Tsuneo 249

Fujii, Hisaichi 129
Fujii, Hisashi 99
Fujimoto, Teruo 355
Fujiwara, Kazue 175
Fukuda, Morikuni 387

Goto, Masayoshi 155

Haneda, Takashi 1, 167, 375
Hashimoto, Yasuhiko 301
Hayakari, Makoto 313
Hayashi, Takeo 51
Hirata, Kazuo 121
Honna, Takao 1, 167
Horigome, Ken 199
Hosaka, Shigetoshi 155
Hoshi, Hiroo 113
Hoshino, Hisao 387

Igari, Tadashi 9
Ikeda, Shigeaki 167
Ikeuchi, Hiroshige 113
Irokawa, Nobuo 191
Ishida, Nakao 59
Ishihara, Nabuo 81
Ishihara, Tokuhiro 129
Ishikawa, Kinji 51
Ishikawa, Makoto 397
Itabashi, Hiroshi 199
Ito, Seiki 87
Ito, Toru 191
Iwabuchi, Junji 397
Iwama, Kitsuya 321
Iwasa, Mineo 267

Kai, Yukihiro 199
Kaise, Kazuo 229
Kaise, Nobuko 229
Kanamasa, Ken 51
Kaneda, Hiroshi 35
Kanno, Hisayoshi 121
Katori, Ryo 51
Kikuchi, Kaneo 121
Kikuchi, Kokichi 259
Kimura, Atsushi 237
Kimura, Michio 229
Kitagawa, Yoshichika 337
Kitamura, Takanobu 355
Kitayama, Tooru 175
Kobayashi, Shigeru 87
Komura, Setsuo 65
Kondo, Shigeji 403
Kondo, Yoshikazu 313
Konn, Mitsuru 69
Konno, Kanahiro 175
Konno, Tasuke 299
Kosaka, Shiro 223, 349
Kudoh, Tooru 393
Kunii, Yasuo 121
Kura, Kazuo 331
Kuroyanagi, Takeo 331

Machida, Tetsuta 113
Maruhama, Yoshisuke 183, 199
Masamune, Osamu 397
Matsubara, Yohichi 87
Matsukawa, Shuh 301
Matsumoto, Noboru 129
Matsumoto, Tsutomu 337
Matsushiro, Takashi 303
Mimura, Nobuhide 35
Minami, Ryoji 393
Mishima, Hiroshi 175
Miura, Takuji 167
Miwa, Shiro 129
Miyazawa, Kozui 1, 167, 375
Mizugaki, Junko 93
Mochizuki, Yohichi 21

Nagasaki, Akio 397
Nagasawa, Junichiro 43
Nakahama, Hiroshi 99
Nakai, Kengo 143
Nakajima, Toshiyuki 167
Nakamura, Takashi 43
Nakao, Tooru 175, 237, 393
Nishigori, Masato 209
Nishikawa, Taisuke 69

Obara, Kijuro 9
Ogata, Masana 93
Ohkawa, Hiromichi 287
Ohmiya, Yoshio 143
Ohmori, Hiroaki 183
Ohneda, Akira 199
Oh-Uti, Kiyota 69
Okabayashi, Toshihiko 209
Okabe, Nobuhiko 175
Okano, Goroh 21
Okuguchi, Fuminobu 183, 199
Okuhara, Eiji 161, 337
Ono, Shigeru 9
Orii, Tadao 393
Oshibe, Mitsumasa 113
Oshima, Toshikatsu 383
Oshiro, Seisho 65
Oyanagi, Kazuhiko 393

Ritsu, Kancho 191

Sagisaka, Kaoru 267
Saito, Keitaro 191
Saito, Setsuko 175
Saito, Shintaro 229
Sakai, Takeaki 199
Sakurada, Toshiro 229
Sakurai, Ritsuro 209
Sakurai, Yutaka 191
Sasaki, Takashi 387
Sasaki, Tatsuya 299
Sato, Haruo 155
Sato, Shigeo 393
Sato, Tetsuo 387
Sato, Toshio 303
Satoh, Hiroshi 81
Seino, Masahide 191
Shikata, Eishiro 337
Shima, Takeshi 301
Shimano, Yoshihiro 209
Shiomura, Tadahiko 129
Shirato, Kunio 1, 167, 375
Shiratori, Tsuneo 209
Shishido, Yoshiro 69
Shishido-Kashiwazaki, Sachiko 81
Sugitani, Michio 321
Sukegawa, Kazuko 393
Sumitomo, Ichiji 321
Suwa, Kunio 275
Suzuki, Masahiro 393
Suzuki, Noriyoshi 303
Suzuki, Tsuguyoshi 81

Takahara, Shigeo 93
Takahashi, Kenkichi 345, 383
Takahashi, Michihiro 113
Takahashi, Nobuo 175
Takahashi, Tsuneo 397
Takahashi, Wataru 303
Takeda, Masataka 9
Taketa, Kazuhisa 93
Takishima, Tamotsu 1
Tani, Yuichiro 99
Toh, Kentaro 259
Tsuiki, Kai 43, 375

Uchino, Fumiya 129
Umenai, Takusei 59, 299
Umezu, Chiaki 276

Wakizaka, Akira 161
Watanabe, Kiyoshi 199
Watanabe, Masao 287
Watanabe, Tatsuo 383

Yamada, Yukio 87
Yamamoto, Makiko 229
Yamamoto, Mitsuaki 99
Yamanaka, Tatsuru 175
Yamashita, Yoshimi 129
Yamauchi, Katsuyo 129
Yasujima, Minoru 191
Yoshida, Katsumi 229
Yoshida, Koichi 113
Yoshida, Yoshiro 387
Yoshinaga, Kaoru 191, 229
Yoshioka, Naofumi 345, 383

CONTENTS

Vol. 123, No. 1, September, 1977

Methylmalonyl-CoA mutase activity of leukocytes in variants and heterozygotes of methylmalonic acidemia. *K. Narisawa, T. Saito, S. Hisa, H. Suzuki, K. Hayasaka, Ts. Arakawa, K. Konno, S. Tsuchida and Y. Tsuchiya* 1

Changes of the ureteral movement in diuretic condition and after ureteral surgery. *T. Kubo, S. Sasaki, S. Numasato, S. Takahashi and T. Akasaka* 9

Pathological study of tracheal and pulmonary lesions in autopsy cases of congenital esophageal atresia. *T. Maeta, Y. Fujiwara, T. Ohizumi, E. Kato, G. Kakizaki, T. Ishidate and T. Fujiwara* 23

Circadian rhythm of the plasma cortisol level in cases of prolonged coma. *H. Okuyama, M. Endo, Y. Ohara, S. Takase and K. Itahara* 33

Freezing index in cryosurgery on the prostate gland. *Y. Shiraiwa, T. Hirai, T. Date and S. Ichijo* 49

Clinical features and laboratory findings of vibration disease: A review of 300 cases. *T. Matoba, H. Kusumoto, Y. Mizuki, H. Kuwahara, K. Inanaga and M. Takamatsu* 57

Comparative double-blind trial of *dl*-α-tocopheryl nicotinate on vibration disease. *T. Matoba, H. Kusumoto, Y. Mizuki and K. Yamada* 67

Sound spectroanalytic diagnosis of malfunctioning prosthetic heart valve. *Y. Kagawa, S. Nitta, N. Satoh, K. Saji, Y. Shibota, T. Horiuchi and M. Tanaka* 77

HLA antigens and toxoplasmic retinochoroiditis. *S. Ohno, G.R. O'Connor and S.J. Kimura* 91

Activities of superoxide dismutase and glutathione peroxidase in the red cells of Japanese acatalasemia blood. *M. Ogata, J. Mizugaki, K. Ueda and M. Ikeda* 95

Vol. 123, No. 2, October, 1977

Selective alveolo-bronchographic findings in type B chronic obstructive lung disease patients with particular reference to lesions in small airways. *S. Sato, M. Kawakami, S. Shimura, R. Fujimoto, T. Hirose, S. Maeda, T. Ubukata and T. Takishima* 99

Hemodynamics in sepsis: its relationship to pulmonary complication. *R. Motoki and K. Honda* 109

Studies on hemodynamics and cardiac function in the immediate postoperative period following open heart surgery. *K. Honda and S. Hoshino* 125

Effects of dibutyryl cyclic-AMP on cardiac output and myocardial contractility in dogs. *A. Okuaki* 139

Histopathology on testicular involvement of leukemia with an emphasis on lymphatics. *H. Wakasa and S. Amano* 147

Electrical activity of superior colliculus associated with eye movements in alert cats. *Y. Hayashi, T. Nagata and K. Shiomi* 161

The content and turnover of norepinephrine in the rabbit brain regions and cardiovascular tissues. *T. Tanaka, A. Seki, J. Fujii, H. Kurihara and M. Ikeda* 177

Decrease and recovery in cell surface charge induced by anesthetics. *K. Sato, K. Kojima and C. Sato* 185

Evaluation of surgical treatments for the major lesion of bilateral silicotuberculosis. *S. Sadakata, S. Tanaka, K. Chiyotani, K. Saito, M. Mishina and A. Iino* 191

Vol. 123, No. 3, November, 1977

Clinical observations on ulcerative colitis. *H. Watanabe, N. Hiwatashi and S. Yamagata* 197

Innervation of the palatine mucous membrane in the *Cebus apella* monkey. *I. Watanabe and B. Konig, Jr.* 215

The dependence of finger tip touch-pressure upon the condition of braille reading. *E. Yamashita and H. Matsumoto* 221

A patient with recurrent hepatic encephalopathy and chronic renal failure treated successfully with long-term hemodialysis. *H. Kaneda, T. Haruyama, S. Chiba, Y. Sugai, T. Hirasawa, M. Takeuchi, H. Wakasa and Y. Yamagata* 227

Enhancement of the cancer chemotherapeutic effect by anticancer agents in the form of fat emulsion. *T. Takahashi, K. Kono and T. Yamaguchi* 235

Serial alveolography – preliminary report. *N. Watabe, F. Hoshino, H. Ito, S. Takahashi, T. Kato, Y. Katsukura and K. Matsuzawa* 247

Association of human leukocyte antigen (HLA)-B5 and -BW22-J with hepatic cirrhosis of apparently unknown etiology. *A. Ohkubo, K. Okimoto, Y. Iwasaki, K. Kosaka, T. Juji and H. Tohyama* 257

Serum zinc and copper levels in healthy Japanese infants. *M. Ohtake* 265

Effects of 1-Sar-8-Ile-Angiotensin II on urinary prostaglandin excretion in patients with essential hypertension. *M. Yasujima, K. Abe, Y. Otsuka, S. Chiba, K. Ritsu, N. Irokawa, M. Seino, Y. Sakurai, K. Saito, T. Ito and K. Yoshinaga* 271

Pregnancy and delivery in penicillamine treated patients with Wilson's disease. *K. Fukuda, A. Ishii, Y. Matsue, K. Funaki, H. Hoshiai and S. Maeda* 279

Comparative studies of non-hemoglobin proteins of adult and newborn red blood cell lysates. *K. Sagisaka, M. Iwasa, H. Yamashita and S. Yamada* 287

Short Report

A method to register a dynamic balance of the upper urinary tract. *O. Yamaguchi and S. Tsuchida* 295

Vol. 123, No. 4, December, 1977

Difference of hepatic circulation between alcoholic and non-alcoholic hepatic cirrhosis. *S. Nakamura, Y. Takezawa, T. Sato, T. Aikawa and K. Kera* 297

Measurement of digital arterial blood pressure and its recording on usual electrocardiograph paper. *M. Kato, T. Koeda, H. Inomata, A. Motoyama, K. Nakai, T. Kimura and T. Chiba* 307

Scintigraphic evaluation of cold thyroid nodules. *H. Oyamada and T. Tabei* 315

Plasma cortisol concentration in newborn infants. *T. Yoshida, Y. Hattori and K. Noda* 323

Ultrasonic studies on endocardial fibroelastosis. *Y. Yoshida, T. Sato, I. Kano, M. Fukuda, T. Sasaki, H. Hoshino, M. Tanaka and Y. Terasawa* 329

Ultrasonic diagnosis of intrascrotal contents. *M. Saitoh, H. Ohe, S. Tanaka, T. Mishina and H. Watanabe* 337

Massive intramedullary globules in IgA monoclonal gammopathy associated with gastric carcinoma. *T. Kanoh, H. Uchino and M. Kusaka* 343

Alcoholic hepatitis with and without alcoholic hyaline. *S. Nakamura, Y. Takezawa, T. Sato, T. Aikawa and K. Kera* 351

Insulin and growth hormone secretion stimulated by intravenous administration of arginine in the low insulin responders (prediabetes ?). *T. Toyota, M. Kudo and Y. Goto* 359

Lipid-chemical features of human gastric cancerous, polypous and ulcerative tissues. *I. Nakazawa, S. Asaki and S. Ito* 365

Inhibition of cellular DNA synthesis by rat peritoneal macrophages. *K. Toh, N. Sato and K. Kikuchi* 371

The effect of iodoacetamide-induced fundic ulcers on gastric carcinogenesis produced by N-methyl-N′-nitro-N-nitrosoguanidine in rats. *S. Majima, M. Fukushima, Y. Fujita and T. Ouchi* 381

Phytohemagglutinin-induced cytotoxic action of normal lymphocytes on cells in tissue culture using ^{14}C-leucine incorporation. *R. Nemoto, K Ishikawa and T. Kato* 389

Short Reports

A secular trend in age at menarche in Sendai city and its surroundings. *M. Moriyama, H. Kashiwazaki, T. Takemoto and T. Suzuki* 393

Evaluation of the antigen specific to the mycelial phase of *Candida albicans* in the serodiagnosis of candidiasis. *T. Umenai and H. Chiba* 395

AUTHOR INDEX

Abe, Keishi 271
Aikawa, Tatsuya 297, 351
Akasaka, Toshiyuki 9
Amano, Shigeru 147
Arakawa, Tsuneo 1
Asaki, Shigeru 365

Chiba, Hiroshi 395
Chiba, Satoru 227, 271
Chiba, Teruo 307
Chiyotani, Keizo 191

Date, Tomonori 49

Endo, Minoru 33

Fujii, Jun 177
Fujimoto, Ryuitsu 99
Fujita, Yoshihiro 381
Fujiwara, Tetsuro 23
Fujiwara, Yoshiyuki 23
Fukuda, Kazuhiko 279
Fukuda, Morikuni 329
Fukushima, Masanobu 381
Funaki, Kenichi 279

Goto, Yoshio 359

Haruyama, Takeshi 227
Hattori, Yutaka 323
Hayasaka, Kiyoshi 1
Hayashi, Yasumasa 161
Hirai, Tsuneo 49
Hirasawa, Takashi 227
Hirose, Toshio 99
Hisa, Shigeo 1
Hiwatashi, Nobuo 197
Honda, Kenji 109, 125
Horiuchi, Togo 77
Hoshiai, Hiroshi 279
Hoshino, Fumihiko 247
Hoshino, Hisao 329
Hoshino, Shunichi 125

Ichijio, Sadatoshi 49
Iino, Atsushi 191
Ikeda, Masao 177
Ikeda, Mikiko 95
Inanaga, Kazutoyo 57
Inomata, Hiroyuki 307
Irokawa, Nobuo 271
Ishidate, Takuzo 23
Ishii, Atsushi 279
Ishikawa, Kiyoshi 389
Itahara, Kastuya 33
Ito, Hiroshi 247
Ito, Shoichiro 365
Ito, Toru 271
Iwasa, Mineo 287
Iwasaki, Yasuhiko 257

Juji, Takeo 257

Kagawa, Yuzuru 77
Kakizaki, Goro 23
Kaneda, Hiroshi 227
Kano, Ichiki 329
Kanoh, Tadashi 343
Kashiwazaki, Hiroshi 393
Kato, Eiichi 23
Kato, Masataka 307
Kato, Tetsuro 389
Kato, Toshio 247
Katsukura, Yoshiteru 247
Kawakami, Masahiko 99
Kera, Kiyoshi 297, 351
Kikuchi, Kokichi 371
Kimura, Samuel J. 91
Kimura, Takeshi 307
Koeda, Toshihiko 307
Kojima, Kiyohide 185
Konig, Bruno, Jr. 215
Konno, Kimiichi 1
Kono, Kenichi 235
Kosaka, Kinori 257
Kubo, Takashi 9
Kudo, Mikihiko 359
Kurihara, Hiroshi 177
Kusaka, Motoo 343
Kusumoto, Hisao 57, 67
Kuwahara, Hiroshi 57

Maeda, Shinsaku 99
Maeda, Susumu 279
Maeta, Toyokichi 23
Majima, Susumu 381
Matoba, Tsunetaka 57, 67
Matsue, Yoshihiko 279
Matsumoto, Hiroshi 221
Matsuzawa, Kunihiko 247
Mishina, Michihito 191
Mishina, Teruo 337
Mizugaki, Junko 95
Mizuki, Yasushi 57, 67
Moriyama, Masaki 393
Motoki, Ryoichi 109

Motoyama, Atsushi 307

Nagata, Tetsu 161
Nakai, Kenji 307
Nakamura, Shozo 297, 351
Nakazawa, Ichiro 365
Narisawa, Kuniaki 1
Nemoto, Ryosuke 389
Nitta, Shinichi 77
Noda, Kiichiro 323
Numasato, Susumu 9

O'Connor, G. Richard 91
Ogata, Masana 95
Ohara, Yoshiro 33
Ohe, Hiroshi 337
Ohizumi, Tetsunosuke 23
Ohkubo, Akiyuki 257
Ohno, Shigeaki 91
Ohtake, Masatoshi 265
Okimoto, Kyoko 257
Okuaki, Akira 139
Okuyama, Hideya 33
Otsuka, Yoichi 271
Ouchi, Takao 381
Oyamada, Hiyoshimaru 315

Ritsu, Kancho 271

Sadakata, Shoichi 191
Sagisaka, Kaoru 287
Saito, Keitaro 271
Saito, Kenichi 191
Saito, Takashi 1
Saitoh, Masahito 337
Saji, Komei 77
Sakurai, Yutaka 271
Sasaki, Shuhei 9
Sasaki, Takashi 329
Sato, Chikako 185
Sato, Kazuya 185
Sato, Noriyuki 371
Sato, Shigeru 99
Sato, Takashi 297, 351
Sato, Tetsuo 329
Satoh, Naoshi 77
Seino, Masahide 271
Seki, Akira 177
Shibota, Yutaka 77
Shimura, Sanae 99
Shiomi, Kunio 161
Shiraiwa, Yasuo 49
Sugai, Yoshiki 227
Suzuki, Hiroshi 1
Suzuki, Tsuguyoshi 393

Tabei, Toshio 315
Takahashi, Sakizo 9
Takahashi, Shoki 247
Takahashi, Toshio 235
Takamatsu, Makoto 57
Takase, Sadao 33
Takemoto, Tai-ichiro 393
Takeuchi, Mutsuo 227
Takezawa, Yoshiaki 297, 351
Takishima, Tamotsu 99
Tanaka, Motonao 77, 329
Tanaka, Shigeho 191
Tanaka, Shigeki 337
Tanaka, Toshiyuki 177
Terasawa, Yoshio 329
Toh, Kentaro 371
Tohyama, Hiroshi 257
Toyota, Takayoshi 359
Tsuchida, Seigi 295
Tsuchida, Shuji 1
Tsuchiya, Yutaka 1

Ubukata, Tadashi 99
Uchino, Haruto 343
Ueda, Kazuko 95
Umenai, Takusei 395

Wakasa, Haruki 147, 227
Watabe, Nobuyuki 247
Watanabe, Hikaru 197
Watanabe, Hiroki 337
Watanabe, Ii-sei 215

Yamada, Koji 67
Yamada, Sadao 287
Yamagata, Shoichi 197
Yamagata, Yo 227
Yamaguchi, Osamu 295
Yamaguchi, Toshiharu 235
Yamashita, Eizo 221
Yamashita, Hiroko 287
Yasujima, Minoru 271
Yoshida, Takeshi 323
Yoshida, Yoshiro 329
Yoshinaga, Kaoru 271